

In re Application of: KUO et al.
Serial No.: 10/050,488
Filed: 01/16/2002

REMARKS

This amendment is being filed in response to the Final Office Action mailed March 11, 2004. This response, which is being filed on or prior to August 11, 2004 with a two-month extension of time, is to be considered timely filed.

Please make of record the following comments and amendments.

Claims 1-24 are pending in the application. Claims 25-30 have been withdrawn from consideration. Claims 1-8, 10-12 and 14-23 are rejected. Claims 9, 13 and 24 are objected to. Claims 18-20 and 25-30 have been canceled. New claims, 31-33, based on the Examiner's allowance of claims 9, 13 and 24, based on added. No claims have been allowed.

Restriction Requirement

The Examiner stated that elected claims of Group I still contain non-elected subject matter. In response, applicants have canceled claims 18-20 without prejudice to applicants' rights to re file said claims in future divisional applications.

Allowable Subject Matter

The Examiner stated that claims 9, 13 and 24 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants have added new claims 31-33 that recite the subject matter of claims 9, 13 and 24 with the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

The Examiner maintained from the previous office action, that Claims 1-8, 10-12 and 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable Baig et al. (Baig) GB 2 125 402 and the secondary reference Chabala et al EP 0113,570 for reasons of record.

The Examiner stated that Baig discloses a compound of formula I and a process to make said compound.

The Examiner stated that Chabala et al. discloses imidazole compounds, specifically on page 2, page 9, scheme 2 and examples 1-4 of Table 1.

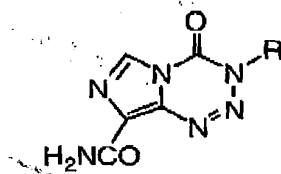
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In response, applicants respectfully traverse the Examiner's rejection and provide the following comments.

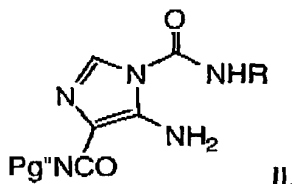
Utilizing the Graham factors in an obviousness analysis, applicants respectfully maintain that under the first (scope and contents of prior art) and second factor (ascertaining the differences between prior art and claims at issue), a finding of obviousness cannot be made in the present case. (See Graham v. John Deere Co., 383 U.S. 1, 148, U.S.P.Q. 459 (1966)).

The Examiner noted that the instant claims differ from Baig in reciting the Pg" as protecting groups. In contrast, Baig includes them as groups whose presence also results in claimed activity. Also, the Examiner noted that the claims of the instant invention require a process of making an imidazole intermediate. Applicants maintain that unlike the claimed invention, Baig does NOT mention any type of imidazole intermediates. Accordingly, per the first and second Graham factors, the differences in scope between the present invention and Baig, preclude a finding of obviousness for claims 1-8, 10-12 and 14-23. Therefore, Baig cannot be relied upon in an obviousness rejection against the claimed invention.

Further, applicants respectfully maintain that the present invention is not obvious in light of Chabala et al. The claimed invention is directed to the preparation of a compound of formula

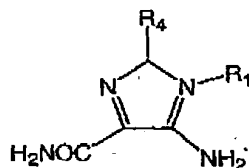


from a compound of formula II



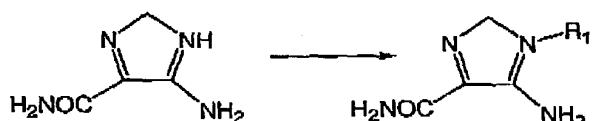
In contrast to the applicants' compound of formula II, Chabala's reaction scheme 2 discloses a compound of formula

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wherein R_1 is a substituted **benzyl** ring and R_4 is hydrogen, lower alkyl or phenyl.

Furthermore, as pointed out by the Examiner in the Final Office Action, Chabala also discloses the following compounds from Example 1, pages 11-13 (see below scheme).



The Examiner states that Chabala shows use of the 5-aminoimidazole-4-carboxamide for making the substituted imidazole as demonstrated on pages 11-12 and spelled out in Table 1 on page 13 (as summarized above).

Applicants maintain from the previous office action, that the Chabala reference fails to teach protecting groups such as PG". In addition, Applicants respectfully maintain that Chabala et al. do not teach the claimed process as summarized above. Chabala's reaction scheme 2 on page 9, merely shows the formation of an imidazole type compound. The Examiner points to pages 11-13 to show an imidazole compound used as a starting compound for Example 1 to support his obviousness rejection. However, applicants respectfully point out that the compound of Example 1 cannot be used to maintain obviousness because the starting compound (an imidazole) used by Chabala DOES NOT contain a nitrogen substituted by the group -CONHR as applicants' compound of formula II does. In fact, neither nitrogen in the imidazole used as Chabala's starting compound is substituted, unlike applicants' compound of formula II.

As previously stated by the applicants, the imidazole type compounds of Chabala's table 1 are different from the compounds disclosed by applicants. Chabala's compounds differ by the fact that they are substituted at the nitrogen position (R_1) with substituted **benzyl** rings. In contrast, applicants' formula II disclose the group -CONHR as a substituent on its nitrogen. Applicants respectfully suggest that Chabala's imidazoles, which are either non-substituted or substituted by halo-substituted benzyl rings do not teach or suggest applicants' claimed invention. Applicants' further point out the fact that Chabala merely describes a

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process of substituting groups (ex. Halo-substituted benzyl rings) upon imidazole compounds. The claimed invention is a process of cyclizing the substituents of single ring imidazole compound in order to form a bicyclic ring compound from the group -CONHR. Applicants' -CONHR group is necessary in order to cyclize the single ring compound into the bicyclic ring compound. Nothing in Chabala teach the cyclization of its single rings into bicyclic rings. Therefore, the differences in scope between the present invention and Chabala, preclude the use of the reference to render claims 1-8, 10-12 and 14-23 obvious.

In addition, it is noted that there is no motivation or suggestion in either reference to combine the compounds of Baig, with the imidazoles of Chabala, to render the claimed invention obvious. Baig does not teach or suggest the use of imidazoles to form the compound of formula I. Chabala only teaches imidazole that are entirely different from applicants' compound of formula II. There is no motivation to combine the two references in order to render applicants' process obvious. As stated above, the differences in scope between Baig and Chabala and the claimed invention, preclude a finding of obviousness. These differences also preclude one of ordinary skill in the art to combine the two references to render applicant's invention obvious. Therefore, based on this lack of motivation and/or suggestion to combine and the comments provided above, applicants respectfully request the withdrawal of this rejection.

Lastly, as stated by the Examiner, the Baig reference, by itself, is deficient for an obvious rejection in that it does not teach or suggest an imidazole intermediate. The Examiner cites Chabala as a secondary reference to address this deficiency. However, due to the numerous factual differences highlighted above between Chabala's imidazoles and applicants' compound of formula II, Chabala fails to cure the deficiencies of Baig to render the claimed invention obvious. Therefore, in light of Baig's deficiency to teach imidazoles and Chabala's failure to cure the deficiency, applicant's respectfully request the withdrawal of this rejection.

No fees, other than the extension of time fees and Notice of Appeal fees, are believed to be due with this amendment. If any fees are determined to be due by this paper, the Commissioner is hereby authorized to deduct such fees from Account No. 19-0385.

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The Examiner is requested to call the undersigned attorney on any matter connected with this application.

Respectfully submitted



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